



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **1** of **3**

Complete if Known

Application Number	10/651,057
Filing Date	August 27, 2003
First Named Inventor	Purnendu K. DASGUPTA et al.
Group Art Unit	To be assigned
Examiner Name	To be assigned
Attorney Docket Number	A-72323/DJB/VEJ

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JK	A1	4,999,098	03-12-1991	Pohl et al.	
JK	A2	6,033,459	03-07-2000	Hase	
JK	A3	6,497,136 B2	12-24-2002	Satou	
JK	A4	6,506,345 B1	01-14-2003	Lee et al.	
	A5				
	A6				
	A7				
	A8				
	A9				
	A10				
	A11				
	A12				
	A13				
	A14				
	A15				

FOREIGN PATENT DOCUMENTS

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	A16					
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Examiner Signature

Frank Lawrence

Date Considered

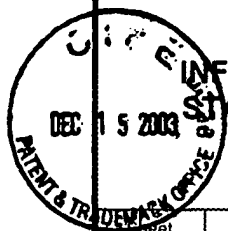
12-27-04

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Sheet	2	of	3	Attorney Docket Number	A-72323/DJB/VEJ
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ^d
11	A28	ALLEGRINI et al., <i>Carbon-coated annular denuders and ion chromatographic measurements for the determination of nitrogen-containing species (NO₂ and NO_x) in remote atmospheres</i> , J. Chromatography A, 1999, 846, pp. 265-268.	
11	A29	BENNER et al., <i>Comparison of Annular Denuder and Filter Pack Collection of HNO₃(g), SO₂(g), and Particulate-Phase Nitrate, Nitrite and Sulfate in the South-West Desert</i> , Atmospheric Environment, 1991, 25A, pp. 1537-1545.	
11	A30	BORING et al., <i>Field Measurement of Acid Gases and Soluble Anions in Atmospheric Particulate Matter Using a Parallel Plate Wet Denuder and an Alternating Filter-Based Automated Analysis System</i> , Anal. Chem., 2002, 74, pp. 1256-1268.	
11	A31	BORING et al., <i>Wet effluent parallel plate diffusion denuder coupled capillary ion chromatograph for the determination of atmospheric trace gases</i> , Talanta, 1999, 48, pp. 675-684.	
11	A32	DASGUPTA et al., <i>A Multiple Parallel Plate Wetted screen Diffusion Denuder for High-Flow Air Sampling Applications</i> , Anal. Chem. 1997, 69, 24, pp. 5018-5023.	
11	A33	DASGUPTA, <i>A Diffusion Scrubber for the Collection of Atmospheric Gases</i> , Atmospheric Environment, 1984, 18, No. 8, pp. 1593-1599.	
11	A34	DASGUPTA, <i>Automated diffusion-based collection and measurement of atmospheric trace gases</i> , Comprehensive Analytical Chemistry XXXVII, 2002, Chap. 5, pp. 99-	
11	A35	De SANTIS, <i>Comment on Wet Effluent Denuder Coupled Liquid/Ion Chromatography Systems: Annular and Parallel Plate Denuders</i> , Anal. Chem., 1994, 66, pp. 3503-3504.	
11	A36	FAN et al., <i>Continuous Automated Determination of Atmospheric Formaldehyde at the Parts Per Trillion Level</i> , Anal. Chem., 1994, 66, pp. 551-556.	
11	A37	FITZ et al., <i>A Fabric Denuder for Sampling Semi-Volatile Species</i> , J. Air & Waste Manage. Assoc., 2000, 50, pp. 981-992.	
11	A38	GENFA et al., <i>Hematin as a Peroxidase Substitute in Hydrogen Peroxide Determinations</i> , Anal. Chem., 1992, 64, pp. 517-522.	
11	A39	HWANG et al., <i>Thermodynamics of the Hydrogen Peroxide-Water System</i> , Environ. Sci. Technol., 1985, 19, 3, pp. 255-258.	
11	A40	JAESCHKE et al., <i>Phase Partitioning of Ammonia and Ammonium in a Multiphase System Studied Using a New Vertical Wet Denuder Technique</i> , Atmospheric Environment, 1998, 32, 3, pp. 365-371.	
11	A41	KEUKEN et al., <i>Simultaneous Sampling of NH₃, HNO₃, HCl, SO₂ and H₂O₂ in Ambient Air by a Wet Annular Denuder System</i> , Atmospheric Environment, 1988, 22, 11, pp. 2541-2548.	
11	A42	LI et al., <i>Measurement of Atmospheric Formaldehyde with a Diffusion Scrubber and Light-Emitting Diode--Liquid- Core Waveguide Based Fluorometry</i> , Field Anal. Chem. & Tech., 2001, 5(1-2), pp. 2-12.	

Examiner Signature	<i>Frank Lawrence</i>	Date Considered	12-27-04
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Sheet 3 of 3	Attorney Docket Number	A-72323/DJB/VEJ	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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HL	A43	LI et al., <i>Measurement of Atmospheric Hydrogen Peroxide and Hydroxymethyl Hydroperoxide with a Diffusion Scrubber and Light-Emitting Diode--Liquid- Core Waveguide Based Fluorometry</i> , Anal. Chem., 2000, 72, 21, 5338-5347.	
HL	A44	LI et al., <i>Measurement of gaseous hydrogen peroxide with a liquid- core waveguide chemiluminescence detector</i> , Analytica Chimica Acta, 2001, 442, 63-70.	
HL	A45	LI et al., <i>Pulsed Excitation Source Multiplexed Fluorometry for the Simultaneous Measurement of Multiple Analytes. Continuous Measurement of Atmospheric Hydrogen Peroxide and Methyl Hydroperoxide</i> , Anal. Chem., 2003, 75, pp. 1203-1210.	
HL	A46	MADER et al., <i>Sampling Atmospheric Carbonaceous Aerosols Using a Particle Trap Impactor/Denuder Sampler</i> , Environ. Sci. Technol., 2001, 35, pp. 4857-4867.	
HL	A47	PHILIPS et al., <i>A Diffusion Scrubber for the Collection of Gaseous Nitric Acid</i> , Separation Sci. & Tech., 1987, 22(4), pp. 1255-1267.	
HL	A48	ROSMAN et al., <i>Laboratory and field investigations of a new and simple design for the parallel plate denuder</i> , Atmospheric Environment, 2001, 35, pp. 5301-5310.	
HL	A49	Sakamoto et al., <i>Development of an automatic continuous analyzer for water-soluble gases in air by combining an artificial lung with an ion chromatograph</i> , Atmospheric Environment, 2002, 36, pp. 441-448.	
HL	A50	SIMON et al., <i>Continuous Automated Measurement of Gaseous Nitrous and Nitric Acids and Particulate Nitrite and Nitrate</i> , Environmental Sci. & Tech., 1995, 29, pp. 1534-1541.	
HL	A51	Simon et al., <i>Continuous Automated Measurement of the Soluble Fraction of Atmospheric Particulate Matter</i> , Analytical Chemistry, 1995, 67, 1, pp. 71-78.	
HL	A52	SIMON et al., <i>Wet Effluent Denuder Coupled Liquid/Ion Chromatography Systems: Annular and Parallel Plate Denuders</i> , Anal. Chem. 1993, 65, pp. 1134-1139.	
HL	A53	TODA et al., <i>Fluorometric Field Instrument for Continuous Measurement of Atmospheric Hydrogen Sulfide</i> , Anal. Chem., 2001, 73, pp. 5716-5724.	
HL	A54	ZHANG et al., <i>Design of a Straight Inlet Diffusion Scrubber. Comparison of Particle Transmission with Other Collection Devices and Characterization for the Measurement of Hydrogen Peroxide and Formaldehyde</i> , Atmospheric Environment, 1991, 25A, No. 12, pp. 2717-2729.	
HL	A55	ZHANG et al., <i>Evaporative Losses of Fine Particulate Nitrates During Sampling</i> , Atmospheric Environment, 1992, 26A, No. 18, pp. 3305-3312.	
HL	A56	ZHANG et al., <i>Theoretical Analysis of Evaporative Losses of Adsorbed or Absorbed Species during Atmospheric Aerosol Sampling</i> , Environ. Sci. Technol., 1991, 25, pp. 456-459.	

Examiner Signature	<i>Frank Lawrence</i>	Date Considered	12-27-04
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